

TCAS Needs Your Help!

A Joint Statement by IFALPA and IFATCA on TCAS



Following the recent EUROCONTROL report on TCAS RA compliance:

<https://www.skybrary.aero/bookshelf/books/5842.pdf>, IFALPA and IFATCA feel the need to send a reminder to the pilot and controller community.

The Eurocontrol study analysed radar data of TCAS RA events taken over a 12-month period over the core area of Europe and reports that only 38% of the RAs were followed correctly, and that 34% even manoeuvred in the opposite direction. The results are in line with previous studies and the trend remains alarming.

While RAs are rare events, when they happen the situation may be critical, and correct action must be taken promptly. Recurrent training should improve flight crew and controllers understanding of how TCAS works, how they should respond to RAs, and the limitations of TCAS. However, monitoring programmes have identified several situations where pilot responses were incorrect.

Aircraft operators and training providers should consider making these the focus of recurrent training sessions. For controllers, the biggest concern is that they could interfere with TCAS by issuing instructions opposite to an RA, which the pilots might then decide to follow instead of the RA. That said, it should be clear that TCAS is a last-resort collision avoidance system, NOT a separation assurance system.

RECOMMENDATIONS FOR PILOTS

- **Always follow the RA**
If you decide not to follow an RA for whatever reason, never ever manoeuvre in the opposite direction. Consider switching to “TA only” if the situation or technical limitations require it (e.g. local approach procedures or engine failure).
- **Do not assume** the aircraft you see outside is the one on the TCAS display and vice versa.
- If your aircraft is equipped with **Auto-TCAS**, keep the autopilot connected but closely monitor the manoeuvre.
- If you receive an instruction during an active RA, let the controller know: **“Unable, TCAS RA”**
- **Report** following an RA to ATC as soon as possible. This is essential for ATC to stop issuing instructions.
- Report the **“Clear of conflict”** and your intentions as soon as possible.
- To prevent unnecessary RAs, **plan to reduce your rate of climb/descent** to max 1500ft/min during the last 1000ft before a level off (unless instructed by ATC to do otherwise).

RECOMMENDATIONS FOR CONTROLLERS

- Once a pilot has announced an **RA**, **do not issue any more instructions**, just acknowledge (i.e. “Roger”)
- If required to pass **traffic information** (by pilot or by local procedures), preferably use phraseology using relative altitudes (e.g. 1000 ft above or below) instead of mentioning the altitudes or Flight levels of the intruder(s).
- To prevent unnecessary RAs, it is not recommended to assign **vertical rates to be maintained until the cleared level** or altitude, unless this is absolutely necessary. Pilots are not allowed to reduce a vertical rate assigned by ATC prior level off. This can result in high vertical closure rates with aircraft 1000ft above/below the cleared level and subsequent TCAS activation